

# Diaphragm In-Line Seals For Flanged Connections Cell-Type (Sandwich), Model 981.10

WIKA Data Sheet DS 98.28

## Applications

- For direct, permanent installation in pipelines
- For flowing, pure and aggressive media
- Chemical process industry
- Petrochemical industry

## Special Features

- Completely round, no corners and edges, European Patent No. 0629846
- For direct installation between two flanges
- Wide choice of special materials

## Description

### Process connection

For flanges following EN 1092-1 / ASME B 16.5  
Nominal sizes see drawing and tables  
Sealing faces, Form B1 or ASME RF 125 ... 250 AA

### Pressure rating

PN 6 ... 400 or class 150 ... 2500

### Pressure ranges

Preferably assembled on pressure gauges  
NS 63, 100, 160 or pressure transmitters,  
measuring ranges 0 ... 0.6 to 0 ... 400 bar

### Body and material of wetted parts

Stainless steel (AISI 316L)

### Measuring instrument connection

Pressure gauge or transmitter directly welded,  
process pressure transmitter with threaded adapter

### System fill fluid

KN2, Silicone oil



**Diaphragm In-line Seals, Cell-Type (Sandwich),  
Model 981.10**

## Options

### Process connection

- Sealing faces per EN 1092-1, Form B2 or per ASME B 16.5, RF 125 AA, 500AA, RFSF; EN 1092-1 groove and tongue; projection and recess; ASME B 16.5 snap ring groove Form RJF (limited for special materials, please inquire)
- Flame arrester approved for Zone 0

### Measuring instrument connection

- Capillary, when ordering please specify: length of capillary
- Cooling tower (for process temperature >140 °C)

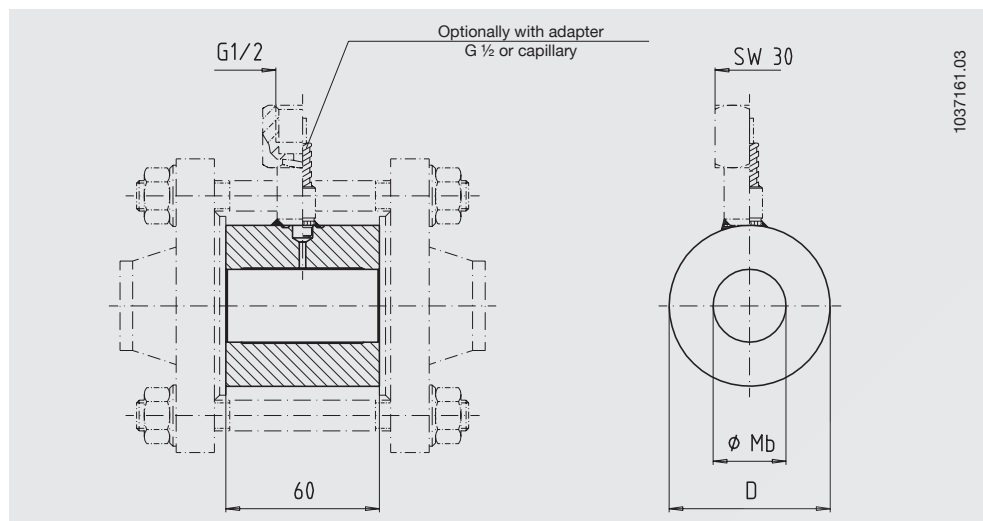
### Material of wetted parts

- Stainless steel 1.4435, 1.4541, 1.4571, 1.4462, Monel 400, Hastelloy C276, Inconel 600, Incoloy 825, tantalum, Hastelloy B2, C4, C22 and nickel
- PFA coating
- ECTFE (Halar®) coating

### Capillary

- Custom lengths between 1 and 15 m
- Soft polyethylene or PTFE armour

## Dimensions in mm



### Connection following EN 1092-1

| DN in mm | PN in bar | Dimensions in mm |      |    | Weight in kg |
|----------|-----------|------------------|------|----|--------------|
|          |           | D                | Mb   | L  |              |
| 25       | 6 ... 400 | 63               | 28.5 | 60 | 1.4          |
| 40       | 6 ... 400 | 85               | 43   | 60 | 2.2          |
| 50       | 6 ... 320 | 95               | 54.5 | 60 | 2.5          |
| 80       | 6 ... 250 | 130              | 82.5 | 60 | 4.0          |
| 100      | 6 ... 160 | 150              | 107  | 60 | 4.7          |
| 125      | 6         | 178              | 132  | 60 | 6.8          |
| 125      | 10 ... 63 | 188              | 132  | 60 | 6.8          |
| 150      | 6         | 202              | 159  | 60 | 9.5          |
| 150      | 10 ... 63 | 212              | 159  | 60 | 9.5          |

### Connection per ASME B 16.5

| NPS    | Class        | Dimensions in mm |      |    | Weight in kg |
|--------|--------------|------------------|------|----|--------------|
|        |              | D                | Mb   | L  |              |
| 1"     | 150 ... 2500 | 63               | 28.5 | 60 | 1.4          |
| 1 1/2" | 150 ... 2500 | 78               | 43   | 60 | 2.2          |
| 2"     | 150 ... 1500 | 95               | 54.5 | 60 | 2.5          |
| 3"     | 150 ... 900  | 130              | 82.5 | 60 | 4.0          |
| 4"     | 150 ... 600  | 150              | 107  | 60 | 4.7          |
| 5"     | 150 ... 300  | 186              | 132  | 60 | 6.8          |
| 6"     | 150 ... 300  | 216              | 159  | 60 | 9.5          |

## Ordering information

Model / Process connection (standard, nominal size, pressure rating, sealing face form) / Material of wetted parts / Instrument connection: direct assembly or via capillary, capillary length / System fill fluid / Assembly on pressure measuring instrument model... / Process conditions: application, process temperature max. and min., ambient temperature max. and min.

Specifications and dimensions given in this leaflet represent the state of engineering at the time of printing. Modifications may take place and materials specified may be replaced by others without prior notice.